

UNION RAILWAYS LIMITED

WEST OF NORTHUMBERLAND BOTTOM

ARC WNB 97

An Archaeological Evaluation

Contract No. 194/870



Museum of London Archaeology Service
July 1997

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Volume 1 of 1

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WEST OF NORTHUMBERLAND BOTTOM

ARCHAEOLOGICAL EVALUATION

SUMMARY

As part of a larger programme of archaeological investigation along the route of the Channel Tunnel, Rail Link Union Railways Limited (URL) commissioned the Museum of London Archaeology Service (MoLAS) to undertake an evaluation of forty-four trial trenches situated in c. 10 hectares of fields south of the A2 and some four kilometres to the south from the centre of Gravesend, Gravesham, Kent.

The earliest features recorded in the evaluation consisted of three ditches, [117] 1420TT, [117] 1425TT and [196] 3057TT which may date from the Mid/Late Bronze Age to Early Iron Age. They were recorded in the north-western part of the site and situated on the shallow west facing slope. A pit of similar date [119] 1862TT, lay on a plateau nearby to the east.

The majority of features are of Late Iron Age to Early Roman date and may be divided into two small groups; one securely dated and the other dated by association only. They indicate that the site may have been occupied by a small settlement with an adjacent field system. The densest concentration of features including pits, structural elements, such as posts, slots and hearths, was recorded in the central part of the site in the area of trenches 1437TT, 1438TT, 1439TT, 1444 and 1446TT. This area, south of Watling street, seems to have been the most suitable terrain for a settlement. One of the pit hearths [164] 1446TT was associated with a charred working surface [167] 1446TT; the only surviving surface, while another, which contained a lining of mudbrick [158] 1444TT, may have been used as a kiln. Both features suggest some type of activity in addition to the usual domestic use. To the east of the proposed settlement a number of ditches; [180], [182], and [184] 1449TT; [152], [154] and [161] 1448TT; [191] and [193] 1450TT, were sample excavated which may represent a field system and boundary ditch to the settlement.

SECTION 1: FACTUAL STATEMENT

1 BACKGROUND

1.1 Introduction

- 1.1.1 The Museum of London Archaeology Service (MoLAS) was commissioned by Union Railways Limited (URL) to carry out an archaeological evaluation between the 24th of April and the 8th of May 1997, on the land south of the A2, east of the A227, and about four kilometres south of Gravesend, Gravesham, Kent (URL Grid 43182 51462) (Fig 1). The evaluation forms part of a programme of archaeological investigation along the line of the Channel Tunnel Rail Link, the aim of which is to assess the effect of the construction of the new railway upon the cultural heritage. An Environmental Assessment has been prepared (URL 1994). This evaluation is within route window 14.
- 1.1.2 The work was carried out according to a Specification for Archaeological Investigations, prepared by URL, detailing the scope and methods of the evaluation, including this report. The area of the evaluation is shown on Fig 2.
- 1.1.3 The archaeological potential of the site *West of Northumberland Bottom* was recognised from crop marks *1426TT, 1440TT*; concentrations of artefacts previously collected from the surface defining areas of investigation *1410TT, 1411TT, 1413TT, 1420TT, 1424TT-1427TT, 1431TT-1440TT, 1443TT*. Further trenches were laid out to sample areas of geophysical anomalies *1421TT, 1441TT, 1442TT, 1446TT-1451TT* and *1862TT* (Fig 2).

1.2 Geology, Landscape and Landuse

- 1.2.1 The site is situated at the foot of the North Downs about four kilometres south of the River Thames. It is bounded to the west by Downs Road, leading from Gravesend to Istead Rise. The land gradually rises from 22.70m OD in the west to 51.00m OD at the east end of the site. The entire site is under arable cultivation.
- 1.2.2 The natural deposits exposed in the trenches consist of Upper Chalk bedrock, either with flint nodules at the top or sealed by weathered chalk. Periglacial striations and run-off channels indent the slopes. The channels and natural hollows are filled with brown loamy silt and gravel. Sometimes pockets of gravel and greensand occur above the weathered chalk. Along the slopes the subsoil of orange brown silty clay has slumped and lies in thicker concentrations in the lower region. The brown silty topsoil is used for farming.
- 1.2.3 The archaeological features were recognised at the surface of weathered chalk. They may, however, have originally been cut from at least the subsoil horizon; the boundaries having been destroyed by erosion, ploughing and worm action.

2 SPECIFICATIONS

2.1 Aims

2.1.1 The 'Specification for Archaeological Investigations' describes the general aims of the archaeological works, that all the evaluations shall aim to provide information to determine:

- the presence / absence, extent, condition, character, quality and date of any archaeological remains within the area of the evaluation.
- the presence and potential of environmental and economic indicators preserved in any archaeological features or deposits.
- the local, regional, national and international importance of such remains, and the potential for further archaeological fieldwork to fulfil local, regional and national research objectives.

2.1.2 The site specific aims described in the specification were to:

- determine the presence / absence etc. of any subsoil features or deposits of archaeological interest which may be associated with , or in close proximity to, the recorded surface concentrations of Romano-British pottery, undated cropmarks and geophysical anomalies.

3 METHODS

3.1 General

3.1.1 A detailed project design for the evaluation was agreed by URL with the County Archaeologist and English Heritage. The following summarises the archaeological aspects of the methodology and notes any deviation from the original specification.

3.2 Survey

3.2.1 The trench locations (Fig 2), specified by URL were established using a total station EDM from URL permanent ground markers.

3.2.2 After excavation, trenches were positioned precisely using total stations and traversing off Ordnance Survey control.

3.2.3 The standard error of the trench positioning was set to normal engineering standards, a traverse accuracy of +/- 15mm over 1km. The trench location plan is based on this information. Drawn plans have been digitised using the AutoCAD graphics program.

3.2.4 The central site coordinate, according to the given URL grid, was 43182 51462.

3.3 Excavation

3.3.1 Forty-four trenches, each measuring 30 x 2 metres, were set out across the 10 hectare site representing a *c.*2% sample (Fig 2). Trench numbers were allocated by URL. An additional trench *3057TT* was opened in order to sample a crop mark south of *1422TT*. The trenches were excavated using a 360° tracked mechanical excavator fitted with a ditching bucket; topsoil and any overburden were excavated to deposits of archaeological significance. Samples of feature fills were excavated by hand.

3.4 Recording

3.4.1 The recording proceeded according to the MoLAS Archaeological Site Manual (1995). Each archaeological deposit was given an individual context number and described on context sheets. Each trench has a summary sheet. Scale plans and sections were drawn of features and all heights indicated on the field drawings were related to Ordnance Survey heights above sea level.

3.4.2 A photographic record of the site was kept.

3.4.3 Artefacts and samples were collected for dating and identification.

3.4.4 A site code was provided by URL, all records can be referenced from this code.

4 RESULTS

4.1 General

- 4.1.1 The main components of the trenches are described below. A summary of all the archaeological contexts and associated finds are listed in the Archaeological Context Inventory (Table 2). Detailed reports on the pottery, building materials, animal bones, plant remains and flint are contained in Appendices 1-5. The site archive has been prepared and includes Datasets for the Fieldwork Event, Contexts, Bulk Finds and Environmental Samples.
- 4.1.2 The archaeological features are part of two broadly defined periods:
 Middle/Late Bronze Age to Early Iron Age (M/LBA-EIA) (Fig 3)
 Late Iron Age to Early Roman (LIA-ERB) (Fig 6).
- 4.1.3 The M/LBA-EIA period was represented by a boundary ditch in *1420TT* and a pit in *1862TT*. Worked flint and flakes were recorded across the site in *1414TT*, *1438TT*, *1444TT* and *1448TT*. All were recorded in residual contexts.
- 4.1.4 The LIA-ERB period was represented by an area of pits to the west of the site in *1414TT*, and by a scatter of pottery sherds in a colluvial deposit in *1423TT*. A fairly dense assemblage of occupational features were recorded in the centre of the site in *1437TT-1439TT*, *1444TT* and *1448TT*. They consisted of pits, two hearths, structural elements such as slots and postholes, and ditches.
- 4.1.5 Undated features such as a hearth with associated working surface in *1446TT* and several successive boundary ditches in *1449TT-1450TT* are possibly part of the LIA-ERB period.

5 TRENCH DESCRIPTIONS

5.1 General

- 5.1.1 The descriptions of the forty-four excavated trenches fall into four main categories:
 Dated Middle/Late Bronze Age to Early Iron Age (M/LBA-LIA); (5.2.1-4)
 Dated Late Iron Age to Early Romano British (LIA-ERB); (5.3.1-8)
 Undated features; (5.4.1-4)
 No archaeological features; (5.5.1-28).
- 5.1.2 All the trenches will be described in this order from west to east.
- 5.1.3 The majority of the features were recorded cutting into natural or weathered chalk, however, it is possible that some cuts may have been initiated from higher up the archaeological sequence but were unrecognisable due to later ploughing or worm action; Well [170] *1439TT* is shown in section as cut from the subsoil horizon.

5.2 M/LBA-LIA

5.2.1 *Trench 1420TT (Fig 4)*

- 5.2.1.1 Base West: 37.46m OD, East: 38.33m OD. Depth 0.60m. Topsoil over mid brown loamy subsoil with frequent chalk fragments, over weathered chalk.
- 5.2.1.2 Within this east-west trench a 2.60m wide and 1.60m deep V-shaped feature was found, orientated north-south with a gradual break of slope at the top and a slightly curved base [117] (Fig 4). This ditch contained seven fills of which the light orange brown silty chalk [131], and the very dark grey loam mixed with frequent chalk fragments [130], were primary fills. The silting and weathering deposit [129] indicates that the ditch lay open for some time before loose small and medium sized chalk fragments [128] and off-white chalky silt [126], probably the remains of a bank, slumped into the ditch from the east marking its disuse. Dark grey brown loam [126] filled the ditch to subsoil level.
- 5.2.1.3 The primary fill [130] contained M/LBA pottery and worked flint. Fill [127] contained bone and worked flint while the upper deposit [125] contained Late Iron age/Early Roman pottery, daub, bone and burnt flint.
- 5.2.1.4 The considerable depth of the feature suggests that it was a boundary or enclosure ditch, dividing the land into a western and eastern area.

5.2.2 *Trench 1425TT (Fig 4)*

- 5.2.2.1 Base West: 42.69m OD, East: 43.37m OD. Depth 0.40m. Topsoil over weathered chalk.

- 5.2.2.2 The ditch recorded in *1420TT* continued further south. It was not excavated because it was a continuation of the feature investigated in *1420TT*, but its uppermost fill [116] was described as compacted reddish brown clayey silt with frequent chalk fragments, flint and occasional patches of pea-grit.
- 5.2.3 *Trench 1862TT (Fig 5)*
- 5.2.3.1 Base North: 40.15m OD, South: 40.68m OD. Depth 0.40m. Topsoil over fractured chalk and brown clay.
- 5.2.3.2 This north-south trench contained three features: two pits [119] and [121], and a ditch [123].
- 5.2.3.3 The truncated remains of a roughly rectangular pit [119] were excavated. It measured 0.92m by 0.60m and was 0.25m deep with steep sides and an irregular base. It was filled with [118], a mid brown grey silty clay containing frequent fire-cracked flint near the surface and pottery, dated M/LBA, deeper in the fill. It lay to the east of the boundary ditch [117] in *Trench 1420TT* suggesting an area of occupation.
- 5.2.3.4 A second, larger, circular pit [121], lay to the north. It was 2.10m in diameter, 100mm deep and had steep sides with a flat base. It was probably heavily truncated by ploughing and no finds were recovered from its fill.
- 5.2.3.5 A 0.40m wide linear feature, 150mm deep, steep sided to the north and falling away slightly to the south, [123], was excavated further north. It contained no finds but may have been contemporary with [119] and [121].
- 5.2.3.6 The features in this trench indicates an area of occupation about 50m from the boundary or enclosure ditch [117/116] in *1420TT/1425TT*. They may have been used during the Late Bronze Age to Early Iron Age.
- 5.2.4 *Trench 3057TT (Fig 5)*
- 5.2.4.1 Base North 31.30m OD, South 31.16m OD. Depth 0.37m. Topsoil over chalky loam.
- 5.2.4.2 Crop marks, noted during the course of the evaluation, led to the clearing of an additional north-south trench situated south of *1422TT*. Ditch [196] aligned roughly east-west, was 2.40m wide and 1.60m deep, V-shaped in section with a 0.40m wide flat base. No finds were retrieved from the fill of this feature.

5.2.4.3 This ditch [196] lay on a perpendicular alignment to ditch [117] and was of similar dimensions, suggesting that they were contemporary. They may represent parts of the same field system or possibly an enclosure ditch. If the latter was the case then the enclosed area would have lain to the north-west of this ditch. It seems more reasonable to suggest that the main area of occupation lay to the east of ditch [117].

5.3 LIA-ERB

5.3.1 *Trench 1414TT (Fig 7)*

5.3.1.1 Base West: 26.39m OD, East: 28.05m OD. Depth West: 0.54m, East 0.40m. Topsoil over subsoil over chalk.

5.3.1.2 This east-west trench is orientated in the north-western part of the evaluation area and contained four features cut into a fairly compacted layer of reddish brown silt with chalk flecks [108].

5.3.1.3 A small pit or posthole [101], 0.50m by 0.30m in plan, 230mm deep, was recorded filled with very compacted reddy brown clayey silt containing frequent fragments of chalk and flint [100].

5.3.1.4 An oval pit [105], 1.30m by 1.10m in plan, 250mm deep, was recorded filled with grey brown clayey silt with frequent chalk and flint fragments, occasional charcoal flecks and burnt daub [104].

5.3.1.5 An oval shaped pit or linear feature [103], 1.20m by 0.90m, 220mm deep was cut into [104], the fill of the oval pit [105]. Pit [103] was filled with grey brown clayey silt with frequent chalk fragments and flint nodules and a little pea grit. It also contained occasional lumps of charcoal (up to 25mm) and flecks of ash, pottery, bone, daub and worked flint [102].

5.3.1.6 A rectangular or square pit [107] at the edge of excavation was at least 2.40m by 1.30m in plan and 0.20m deep. It contained a reddish brown clayey silt with frequent flint nodules and chalk 'pebble' inclusions, bone, burnt daub worked flint and pottery [106].

5.3.1.7 Although there is some evidence of worked flint in [102] and [106], the presence of Iron Age/Roman pottery suggests that the features date from this period.

5.3.2 *Trench 1423TT*

- 5.3.2.1 Base West: 34.21m OD, East: 36.05m OD. Depth 0.60m. East: Topsoil over weathered chalk. West: a 'dip' containing reddish brown subsoil.
- 5.3.2.2 At the base of this east-west trench, a layer of fairly compacted reddish brown clayey silt with occasional flint pebbles [115], contained some LIA-ERB pottery lying in a natural depression in the chalk as a result of colluvium/run-off.
- 5.3.3 *Trench 1437TT (Fig 8)*
- 5.3.3.1 Base West: 39.00m OD, East: 38.97m OD. Depth 0.57 m. Topsoil over reddish brown silt, occasional medium flint pebbles, red brown brickearth and flint pebbles, pale brown chalky silt and light brown silt.
- 5.3.3.2 This east-west trench contained five features: a ditch [142], two linear features [144] and [146], the latter with posthole [150] at its base, lay in a north-west to south-east alignment. The linear feature [160] which aligned north-south was interpreted as being possibly natural and of pre-glacial date.
- 5.3.3.3 Ditch [142] was 1.10m wide and 0.35m deep, the gently sloping sides surrounding a rounded base. The fill consisted of light grey brown silt containing moderate flint and chalk fragments and undiagnostic prehistoric pottery [141].
- 5.3.3.4 The shallow linear feature [144], situated to the east of [142], was at least 1.80m long, 0.35m wide and 70mm deep. The feature, possibly a beam slot, contained a stakehole at its base. Both features were filled with a grey brown silt with orange sandy silt patches containing flint and chalk fragments.
- 5.3.3.5 The linear feature [146] was 2.40m wide, 190mm deep was situated 3.40m to the east of slot [144]. At its base feature [146] contained a postpit [150] with a post pipe [148]. All three features were filled with compacted reddish brown sandy silt containing frequent chalk and flint fragments as well as burnt daub and pottery [145], [147], [149].
- 5.3.3.6 It may be that this group of features, slot/stakehole [144], slot [146] and posthole [150], represent part of the western and eastern walls of a building, the wide linear feature [146] having been part of robbing.
- 5.3.3.7 The ditch [142] which was orientated on a parallel alignment to [144] and may associated with it.
- 5.3.3.8 The unexcavated grey brown silt [159] and fill [151] were either part of an earlier ditch or remains of a robbed structure. [151] contained a Roman pottery sherd. Situated to the

east on the same alignment as [146], all these features may have been broadly contemporary.

5.3.4 *Trench 1438TT (Fig 8)*

5.3.4.1 Base West: 40.44m OD, East: 41.21m OD. Depth 0.38-0.46m. Topsoil over weathered chalk and pockets of reddish brown clay and flint pebbles.

5.3.4.2 This east-west trench contained four features: Pit or slot [175] with posthole [177], pit cut/fill [189] and the ditch cut/fill [190].

5.3.4.3 The oval-shaped pit or slot [175] was quarter-sectioned. It measured 1.12m by 1.20m and was 0.44m deep before extending beyond the limit of excavation. At its base it contained a stakehole [177]. The stakehole was filled with loose sandy silt [176] containing occasional charcoal flecks, and the lower fill of the pit [175] was filled with compacted red brown silt interbedded with charcoal and ash lenses [174], which sealed the stakehole [177]. A compacted red brown silt [173] filled up the remainder of pit or slot [175]. Both fills, [173] and [174], contained LIA-ERB pottery, burnt daub and flint.

5.3.4.4 The small pit cut/fill [189] had a steep western side and a base sloping to the west. It was filled by loose clayey silt with chalk, containing no finds.

5.3.4.5 The ditch cut/fill [190] aligned north-south and consisted of very compacted brown clayey silt, containing no finds.

5.3.4.6 Although only one of this group of features can be dated to the LIA-ERB Period, the occurrence of one ditch and two pit features places this trench in an area of the site with a concentration of features including those in 1437TT, 1439TT and 1444TT.

5.3.5 *Trench 1439TT (Fig 9)*

5.3.5.1 Base North: 40.98m OD, South: 41.77m OD. Depth 0.26-0.68m
Topsoil over subsoil over chalk and orange clay with flint.

5.3.5.2 This north-south trench contained a large pit or well [170] and a ditch [172].

5.3.5.3 The large cut feature [170] measured 4.80m wide at the top becoming a circular shaft 2.60m in diameter 0.80m below the suggested cutting horizon at the surface of subsoil. This feature may have been a well. Two sections were excavated to 39.64m OD, 1.50m below the base of the trench, not reaching the base of the feature. The mid brown silty

clay with small flint nodules contained some LIA-ERB pottery but otherwise remained fairly homogenous. This seems to have been a backfill marking the disuse of the well .

- 5.3.5.4 The linear feature [172], probably a ditch, aligned north-west to south-east, was at least 3.50m long, on average 0.70m wide and 0.50m deep. It had steep sloping sides and a flat base. The fill consisted of grey brown ‘stony’ silt with angular flint and chalk fragments, no finds were recovered.
- 5.3.5.5 The ditch [172] aligned broadly with ditch [142] in *Trench 1437* to the west, possibly marking out the north-eastern and south-western boundaries of an area of proposed settlement. The well [170] would have lain within the enclosure, possibly formed by ditches [172] and [142].
- 5.3.6 *Trench 1444TT (Fig 10)*
- 5.3.6.1 Base West: 41.2m OD, East: 41.90m OD. Depth 0.86m
Topsoil over mid brown clay with flint nodules, over fractured chalk with pockets of brown clay.
- 5.3.6.2 This east-west trench contained three small cut features [132], [134], [138] and a pit [158].
- 5.3.6.3 The 1m by 0.74m oval pit [132] was 0.21m deep and filled with loose mid grey brown silty clay, some charcoal and LIA-ERB pottery [188], sealed by mid brown clay [135].
- 5.3.6.4 At 0.50m from pit [132] lay a rectangular cut [134], measuring 0.30m by 0.60m by 0.30m deep, its base sloping slightly to the south. It was filled with mixed mid brown silty sand with charcoal containing bone, flint and LIA-ERB pottery [133].
- 5.3.6.5 To the east of [134] lay slot [138] which was 2m long, up to 0.70m wide and 0.15m deep. It was filled with dark grey black mixed silt [139]. Features [132] and [138] were aligned east-west.
- 5.3.6.6 Pit [158] was rectangular with rounded corners, 2.20m by 0.90m in plan and at least 0.40m deep. Along the southern side lay frequent daub fragments [157]. Above it lay loose light to mid grey mixed ash and silt with occasional fire-cracked flint, bone, oyster shell and pottery dated LIA-ERB [156]. Above this fill lay mid brown clay with some silt, occasional burnt flint, bone and Roman pottery [140]. A stakehole filled with brown silty clay lay close to its northern edge. At the base of the primary fill of the pit was a deposit of mid brown silty clay with small white chalk fragments.

5.3.6.7 The burnt mud brick lining *in situ* suggest that feature [158] had been subjected to burning, perhaps on a regular basis, which could suggest it may have been used as a kiln or a hearth. This trench forms part of the area of LIA-ERB occupation as seen in 1437TT-1439TT.

5.3.7 *Trench 1446TT (Fig 10)*

5.3.7.1 Base West: 43.92m OD, East: 45.42m OD. Depth 0.60m
Topsoil over clayey loam, over brickearth.

5.3.7.2 This east-west trench revealed evidence of a hearth [164], a small pit or post hole [166] and a burnt surface [167].

5.3.7.3 A small circular cut, 0.46m in diameter with a red burnt base [164] indicating a probable hearth, was filled with light grey loamy brickearth with frequent fragments of charcoal and burnt brickearth [163].

5.3.7.4 A probable small pit [166] lay partly exposed near the southern edge of the trench, it was filled with light brown silty brickearth with charcoal flecks [165].

5.3.7.5 To the west of both features lay three patches of black stained brickearth with signs of scorching along the edges [167], which overlay natural chalk, suggesting a working surface associated with hearth [164] and pit [166]; the scorching possibly resulting from hearth rake-out.

5.3.8 *Trench 1448TT (Fig 11)*

5.3.8.1 Base North: 46.94m OD, South: 47.81m OD. Depth 0.30m
Topsoil over chalk.

5.3.8.2 This north-south trench contained three ditches [152], [154], [161], and a linear feature [186].

5.3.8.3 Ditch [152], aligned roughly west-east, was 0.75m wide and 0.30m deep and had steeply sloping sides and a flat base. The ditch was filled with mid brown loam mixed with moderate small chalk fragments and angular pebbles, including bone [153]. Abutting [152] at its northern side and interpreted as a stepping slope, lay cut [161], filled with the same deposit as [152]. Stratigraphically [152] seemed to cut into feature [161]; the latter may, however, represent a widening or slumping of the eastern edge of the ditch.

- 5.3.8.4 Ditch [154] aligned roughly west-east and was 1m wide and 0.26m deep, it had steep sloping sides and a curved base. It was filled with mid brown grey silty clay mixed with occasional angular pebbles and chalk flecks. The inclusions contained bone and LIA-ERB pottery [155].
- 5.3.8.5 To the north of the trench lay an unexcavated 0.40m wide linear feature [186], probably another ditch, it was aligned north-east to south-west.
- 5.3.8.6 These ditches possibly define the perimeter of an area of occupation to the east of which lay open landscape and possible fields.

5.4 Trenches containing undated features

5.4.1 Trench 1417TT (Fig 11)

- 5.4.1.1 Base North: 28.31m OD, South: 28.12m OD. Depth 0.20-0.30m
Topsoil over chalk with some flint nodules and patches of weathered chalk.
- 5.4.1.2 This north-south trench contained a ditch [110], a gully or slot [112] and a group of four stakeholes which were recorded as one context because they were of similar dimensions, containing the same fills and having been probably contemporary [114].
- 5.4.1.3 Ditch [110] aligned east-west, it was 0.30m wide and 180mm deep and the sides sloped gently to a flat base. It was filled with orange brown silty clay with flint and chalk fragments which increased towards the base [109].
- 5.4.1.4 1m from [110] lay a 0.25m wide and 0.30m deep slot or gully [112]. It had a shallow slope and rounded base and was filled with [111] consisting of light orange brown silt with small chalk and flint fragments and flecks. Some patches of weathered chalk occurred at the base of the fill.
- 5.4.1.5 A cluster of four stakeholes was recorded as one number [114]. They were on average 140mm deep and were filled with orange brown silty clay with fragments of chalk and flint [113].
- 5.4.1.6 If the slot [112] belonged to a building then the stakeholes [114] may also have been part of it. The features of this trench may be seen in context with the pits and post in *1414TT* forming part of the western area of occupation.

5.4.2 Trench 1442TT

- 5.4.2.1 Base West: 45.84m OD, East: 46.85m OD. Depth 0.37-0.65m. Topsoil was recorded over; west: loamy subsoil, clayey subsoil with frequent chalk flecks, over brickearth and weathered chalk; east: weathered chalk.
- 5.4.2.2 This east-west trench contained one unexcavated feature [194]. At the base of the trench lay lenses of weathered chalk and brickearth.
- 5.4.2.3 Feature [194] had an irregular oval shape 1.10m wide and at least 2m long and was either a pit or a natural hollow. The surface of the fill consisted of light brown sandy silt with flint nodules. Although it is uncertain whether the feature was man-made or, for instance a tree hole, it marks a point close to the north-eastern periphery of ditches seen in 1449TT.
- 5.4.3 *Trench 1449TT*
- 5.4.3.1 Base North: 47.53 OD, South: 48.07m OD. Depth 0.26m. Topsoil over chalk.
- 5.4.3.2 This north-south aligned trench contained three ditches [180], [182] and [184]. They were aligned parallel, north-west to south-east and sealed by a spread [179], which was probably a mixture of all their fills.
- 5.4.3.3 Ditch [180] was 1.10m wide and 0.23m deep, with gradually sloping sides and a flat base. It was filled with mid greyish brown loam mixed at the base with small to medium angular and rounded pebbles and small chalk fragments [181].
- 5.4.3.4 Ditch [182] was 0.50m wide and 0.16m deep. It was filled with mid greyish brown loam mixed at the base with small to medium angular and rounded pebbles and small chalk fragments [183].
- 5.4.3.5 Ditch [184] was about 0.60m wide and machined out to a depth of 60mm. It was filled with brown loam with frequent chalk fragments and pebbles [185].
- 5.4.3.6 All three ditches were sealed by mid brown loam mixed with moderate small to medium pebbles [179].
- 5.4.3.7 It is possible that these ditches mark the north-east boundary of the eastern area of occupation.
- 5.4.4 *Trench 1450TT (Fig 12)*

- 5.4.4.1 Base West: 49.08m OD, East: 50.10m OD. Depth 0.54m
Topsoil over loamy subsoil, over weathered chalk.
- 5.4.4.2 This trench contained two ditches [191] and [193], the former of which was not investigated.
- 5.4.4.3 Ditch cut/fill [191] was 0.50m wide and filled with mid brown sandy silt with flint nodules.
- 5.4.4.4 Ditch [193] had the same width as ditch [191], was about 100mm deep, it had steeply sloping sides and a flat base. It was filled with mid brown sandy silt with flint nodules [192].
- 5.4.4.5 Both ditches may show the southern continuation of the boundary mentioned in *1449TT*.

5.5 Trenches without archaeology

5.5.1 Trench 1410TT

- 5.5.1.1 Base North: 22.46m OD, South: 22.90m OD. Depth 0.60m average.
Topsoil, colluvium and subsoil excavated to weathered chalk and chalk.

5.5.2 Trench 1411TT

- 5.5.2.1 Base West: 23.89m OD, East: 226.43m OD. Depth 0.20m
Topsoil excavated to chalk.

5.5.3 Trench 1412TT

- 5.5.3.1 Base North: 23.13m OD, South: 22.21m OD. Depth 0.40-0.90m.
Topsoil, colluvium, subsoil and weathered chalk excavated to chalk.

5.5.4 Trench 1413TT

- 5.5.4.1 Base North: 28.54m OD, South: 27.76m OD. Depth 0.12-0.23m.
Topsoil excavated to chalk.

5.5.5 *Trench 1415TT*

- 5.5.5.1 Base North: 33.87m OD, South: 33.74m OD. Depth 0.60m.
Topsoil excavated to weathered chalk with pockets of clayey silt. A series of natural features filled with loosely compacted weathered chalk.

5.5.6 *Trench 1416TT*

- 5.5.6.1 Base West: 23.10m OD, East: 25.61m OD.
Topsoil and colluvium sloping to west. Thin horizon of subsoil over chalk.

5.5.7 *Trench 1418TT*

- 5.5.7.1 Base West: 30.79m OD, East: 32.75m OD.
Topsoil, dirty chalk, greensand and weathered chalk excavated to 0.46-0.76m below the surface. A number of red brown clay filled features include a 0.60m wide natural channel which was orientated in a curved line roughly north-south.

5.5.8 *Trench 1419TT*

- 5.5.8.1 Base North: 35.06m OD, South: 35.36m OD.
Topsoil, subsoil and weathered chalk excavated to 0.67m below the surface to chalk.

5.5.9 *Trench 1421TT*

- 5.5.9.1 Base West: 24.78m OD, East: 27.08m OD.
Topsoil and subsoil on a west facing slope excavated to 0.60-1.20m below the surface to weathered chalk. Several natural periglacial run-off channels.

5.5.10 *Trench 1422TT*

- 5.5.10.1 Base North: 30.88m OD, South: 31.06m OD. Depth 0.55m.
Top soil and loamy subsoil over chalky subsoil. At the base weathered chalk with frequent striations orientated down the slope, identified as periglacial channels.

5.5.11 *Trench 1424TT*

5.5.11.1 Base North: 38.03m OD, South: 38.35m OD. Depth 0.70m.
Topsoil over weathered chalk. At the base periglacial striations filled with light brown weathered chalk.

5.5.12 *Trench 1426TT*

5.5.12.1 Base North: 39.20m OD, South: 39.62m OD. Depth 0.40m.
Topsoil and light brown chalky subsoil excavated to weathered chalk.

5.5.13 *Trench 1427TT*

5.5.13.1 Base West: 38.89m OD, East: 38.37m OD. Depth 0.70-0.90m
Topsoil over subsoil of mid brown clay with flint nodules, excavated to fractured chalk with pockets brown clay. Natural hollows and run-offs filled with clay loam and flint pebbles.

5.5.14 *Trench 1428TT*

5.5.14.1 Base North: 26.29m OD, South: 26.29m OD. Depth 1.10m.
Topsoil over loamy subsoil, over chalky loam. Frequent striations of periglacial run-offs on the chalk.

5.5.15 *Trench 1429TT*

5.5.15.1 Base West: 25.43m OD, East: 27.90m OD. Depth 0.37m.
Topsoil over subsoil. Several periglacial channels in weathered chalk.

5.5.16 *Trench 1430TT*

5.5.16.1 Base North: 35.99m OD, South: 36.08m OD. Depth 0.50m.
Topsoil over mid brown friable silty subsoil over pale brown chalky silt, excavated to chalk 0.50m. Several naturally produced hollows at the eastern side.

5.5.17 *Trench 1431TT*

5.5.17.1 Base West: 37.81m OD, East: 39.17m OD. Depth 0.26-0.55m.
Topsoil over reddish brown brickearth, over pale brown chalky silt. To the east a 0.25m wide linear feature, interpreted as a land drain, was aligned straight north-east to south-west and contained a pale brown chalky fill.

5.5.18 *Trench 1433TT*

- 5.5.18.1 Base West: 40.07m OD, East: 40.85m OD. Depth 0.30-0.70m.
Topsoil over up to 50mm thick orange reddish brown brickearth with flint pebbles, excavated to chalk.

5.5.19 *Trench 1434TT*

- 5.5.19.1 Base West: 40.89m OD, East: 40.86m OD. Depth 0.30-0.70m
Topsoil over up to 0.25m thick pale brown chalky silt, over pale to mid brown chalky silt, excavated to chalk.

5.5.20 *Trench 1435TT*

- 5.5.20.1 Base North: 39.15m OD, South: 39.49m OD. Depth 0.94m.
Topsoil over mid brown silty subsoil, over reddish brown clay with flint pebbles, excavated. The existing natural ground surface is undulating and irregular.

5.5.21 *Trench 1436TT*

- 5.5.21.1 Base North: 38.65m OD, South: 39.00m OD.
Topsoil over mid brown clay with flint nodules excavated up to 1m below the existing ground surface. The natural consists of grey brown clay and flint pockets to the south and fractured chalk to the north.

5.5.22 *Trench 1440TT*

- 5.5.22.1 No measurements. Depth 0.50m.
East-west trench situated in slight bowl or depression at the top of the slope. Top soil (0.25m), over loamy subsoil (0.25m) excavated to weathered chalk. At the base several hollows filled with clay and flint pebbles.

5.5.23 *Trench 1441TT*

- 5.5.23.1 Base North: 343.81 OD, South: 44.24m OD. Depth 0.85m.
Top soil over loamy subsoil excavated to weathered chalk. At the base undulating areas of clay with flint and weathered chalk.

5.5.24 *Trench 1443TT*

5.5.24.1 Base North: 41.23m OD, South: 41.77m OD. Depth 0.30-0.35m.

Topsoil over several patches of reddish brown silty clay in hollows, excavated to chalk.

5.5.25 *Trench 1445TT*

5.5.25.1 Base North: 42.98m OD, South: 43.21m OD. Depth 0.25m.

Topsoil excavated to weathered chalk and pockets of clay with flint pebbles.

5.5.26 *Trench 1447*

5.5.26.1 Base West: 40.1740.89m OD, East: 41.1740.86m OD. Depth 0.92m.

Topsoil over loamy subsoil, over brickearth with clay and flint pebbles, excavated to weathered chalk with brickearth patches.

5.5.27 *Trench 1451TT*

5.5.27.1 Base North: 50.26m OD, South: 50.61m OD. Depth 0.25m.

Topsoil excavated to weathered chalk with pockets of clay with flint pebbles and green sand.

5.5.28 *Trench 3058TT*

5.5.28.1 Base North: 40.07m OD, South: 40.27m OD. Depth 0.27m.

Topsoil excavated to fractured chalk and brown clay. Three natural run-offs filled with clay and flint pebbles.

6 ARCHAEOLOGICAL DATASETS

6.1 Table 1 : Events Dataset

<p> EVENT_NAME:West of Northumberland Bottom EVENT_CODE:ARC WNB 97 EVENT_TYPE:Evaluation CONTRACTOR:Museum of London Archaeology Service DATE:24/4/97-8/5/97 GRID:431820 514620 PROJECT: CTRL COUNTY:Kent DISTRICT:Gravesham PARISH: SMR: SITE_TYPE:Cultivated Land 3 - Operation to a depth >0.25m PERIOD:Late-Middle Bronze Age; Late Iron Age-Early Romano British; Roman METHOD:Mechanical removal of topsoil; hand excavation and recording of archaeological features. PHASING:Late Bronze Age to Early Iron Age; Late Iron Age to Early Romano British ENVIRON:Small numbers of charred cereal grains eg. wheat (<i>Triticum</i> spp.), weed seeds and charcoal. FINDS:Pottery, a few CBM and a larger quantity of daub; bone; flint flakes. GEOLOGY:Chalk with pockets of loam and flint. CONTEXT_NUM:101 + 44 trench sheets THREAT:CTRL SAMPLE:2% SUMMARY:44 trenches revealed a Late Bronze Age ditch and pit. The majority of features, 36 pits, ditches, structural trenches and two hearths, were part of a Late Iron Age-Early Roman possible settlement with field systems to the west and east. ARCHIVE: ACC_NUM: </p>
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6.2 Table 2 : Archaeological Context Inventory

Key:

M/LBA-EIA	Middle /Late Bronze Age to Early Iron Age
PH	Prehistoric
LIA-ERB	Late Iron Age to Early Romano British
ERB	Early Romano British
R	Roman

TRENCH_URL	CONTEXT	TYPE	PERIOD	ASSOCIATION	COMMENTS
1414TT	100	Deposit		101	Posthole fill
1414TT	101	Cut			Posthole
1414TT	102	Deposit	R	103	Feature fill
1414TT	103	Cut			Feature
1414TT	104	Deposit		105	?Pit fill
1414TT	105	Cut			?Pit
1414TT	106	Deposit	LIA-ERB	107	Pit fill
1414TT	107	Cut			Pit
1414TT	108	Deposit			Layer
1417TT	109	Deposit		110	Ditch fill
1417TT	110	Cut			Ditch
1417TT	111	Deposit		112	Ditch fill
1417TT	112	Cut			Ditch
1417TT	113	Deposit		114	Posthole fill
1417TT	114	Cut			Posthole
1423TT	115	Deposit	LIA-ERB		Layer, colluvium
1425TT	116	Deposit		117	Ditch fill
1420TT	117	Cut			Large boundary ditch
1862TT	118	Deposit	M/LBA-EIA	119	Pit fill
1862TT	119	Cut			Pit
1862TT	120	Deposit		121	Pit fill
1862TT	121	Cut			Pit
1862TT	122	Deposit		123	?Slot fill
1862TT	123	Cut			?Slot
1420TT	124	Deposit			Subsoil
1420TT	125	Deposit	LIA-ERB	117	Secondary ditch fill
1420TT	126	Deposit		117	Secondary ditch fill
1420TT	127	Deposit		117	?Bank of ditch
1420TT	128	Deposit		117	Weathering of ditch
1420TT	129	Deposit		117	Weathering of ditch
1420TT	130	Deposit	M/LBA-EIA	117	Primary fill of ditch
1420TT	131	Deposit		117	Primary fill of ditch
1444TT	132	Cut			Pit
1444TT	133	Deposit	LIA-ERB	134	Pit fill
1444TT	134	Cut			Pit
1444TT	135	Deposit		132	Upper fill of pit
1444TT	136	Deposit		134	Upper fill of pit
1444TT	137	Deposit		138	Linear feature fill
1444TT	138	Cut			Linear feature
1444TT	139	Deposit		138	Primary fill of linear feature
1444TT	140	Deposit	R	158	Upper fill of pit
1437TT	141	Deposit	PH	142	Ditch fill
TRENCH_URL	CONTEXT	TYPE	PERIOD	ASSOCIATION	COMMENTS

WEST OF NORTHUMBERLAND BOTTOM (ARC WNB 97) EVALUATION REPORT

1437TT	142	Cut			Ditch
1437TT	143	Deposit		144	?Slot fill
1437TT	144	Cut			?Slot & posthole
1437TT	145	Deposit	ERB	146	?Slot fill
1437TT	146	Cut			?Slot with posthole
1437TT	147	Deposit	ERB	146	Postpipe fill
1437TT	148	Cut		146	Postpipe
1437TT	149	Deposit	LIA-ERB	146	Postpit fill
1437TT	150	Cut		146	Postpit
1437TT	151	Deposit	R		Unexcavated ditch fill
1448TT	152	Cut			Ditch
1448TT	153	Deposit		152	Ditch fill
1448TT	154	Cut			Ditch
1448TT	155	Deposit	LIA-ERB	154	Ditch fill
1444TT	156	Deposit	ER	158	Pit fill
1444TT	157	Deposit		158	Pit fill
1444TT	158	Cut			Pit
1437TT	159	Deposit			Unexcavated ?pit
1437TT	160	Deposit			Poss. pre-glacial feature
1448TT	161	Cut			Poss. associated with 152
1448TT	162	Deposit		161	Poss. associated with 152
1446TT	163	Deposit		164	Small hearth fill
1446TT	164	Cut			Small hearth
1446TT	165	Deposit		166	?Post/pit fill
1446TT	166	Cut			?Post/pit
1446TT	167	Deposit			Burnt surface of nat. brickearth
1437TT	168	Deposit			Unexcavated ditch fill
1439TT	169	Deposit	LIA-ERB	170	Backfill of ?pit/well
1439TT	170	Cut			?Pit/well
1439TT	171	Deposit		172	Ditch fill
1439TT	172	Cut			Ditch
1438TT	173	Deposit	LIA-ERB	175	Pit fill
1438TT	174	Deposit	LIA-ERB	175	Pit fill
1438TT	175	Cut			Small pit
1438TT	176	Deposit		177	Posthole fill
1438TT	177	Cut			Posthole
1438TT	178	Deposit			Unexcavated ditch fill
1449TT	179	Deposit			Layer, spread
1449TT	180	Cut			Ditch
1449TT	181	Deposit		180	Ditch fill
1449TT	182	Cut			Ditch
1449TT	183	Deposit		182	Ditch fill
1449TT	184	Cut			Ditch
1449TT	185	Deposit		184	Ditch fill
1448TT	186	Cut			Linear feature
1448TT	187	Deposit	LIA-ERB	186	Fill of linear feature
1444TT	188	Deposit	LIA-ERB	132	Pit fill
1438TT	189	Deposit			Unexcavated pit fill/cut
1438TT	190	Deposit			Ditch cut/fill
1450TT	191	Deposit			Ditch cut/fill
1450TT	192	Deposit		193	Fill of linear feature
1450TT	193	Cut			Linear feature
1442TT	194	Deposit			Unexcavated feature
TRENCH_URL	CONTEXT	TYPE	PERIOD	ASSOCIATION	COMMENTS

WEST OF NORTHUMBERLAND BOTTOM (ARC WNB 97) EVALUATION REPORT

3057TT	195	Deposit		196	Upper ditch fill
3057TT	196	Cut			Ditch seen as crop mark
3057TT	197	Deposit		196	Ditch fill
3057TT	198	Deposit		196	Lens within 199
3057TT	199	Deposit		196	Ditch fill
3057TT	200	Deposit		196	Primary ditch fill

SECTION 2: STATEMENT OF IMPORTANCE

7 CONCLUSIONS

7.1 Extent of archaeological deposits

7.1.1 Archaeological deposits were found in 16 of 44 trenches. They consisted mostly of feature fills with the exception of one occupational surface and a hillwash deposit in *1423TT*. They can be broadly divided into four groups:

M/LBA-EIA ditches and a pit nearby to the east

1420TT, 1425TT, 3057TT, 1862TT

LIA-ERB isolated occupational features such as pits to the north-west

Trench 1414TT

The LIA-ERB settlement in the centre measuring about 400m across in west-east direction, seen in

1437TT, 1438TT, 1439TT, 1444TT, 1446TT, 1448TT

Undated features possibly contemporary with the LIA-ERB settlement, such as structural elements in the west and boundary ditches to the east

Trenches 1417TT, 1449TT, 1450TT.

7.1.2 The remaining trenches contained no deposits of archaeological significance.

7.2 Nature of archaeological deposits

7.2.1 Archaeological deposits within cut features were easily distinguished from the natural weathered chalk and chalk bedrock beneath. Apart from a few deep pits and ditches, such as ditches [117] in *1420TT*, [196] in *1439TT*, and pit/well [170] in *1439TT*, most features were heavily truncated at the top by ploughing and erosion. The deposits consisted mainly of reddish brown silty clay or loam which was mixed with grey silts according to the content of humic inclusions. Generally the soil conditions allowed a moderate to poor degree of survival for bones and organic materials (see Appendix 3). The occurrence of slots, sometimes with associated stakeholes and postholes, and the presence of burnt daub with timber impressions (see Appendix 2), suggest the presence of a timber and clay buildings. In *1444TT* and *1446TT*, there was evidence of *in-situ* occupation represented by two hearths, one having been constructed in a more sophisticated way with mudbrick walling, the other with an adjacent burnt working surface suggest some kind of craft production.

7.3 Character of the site

7.3.1 The contours of the terrain may have played a role in how the site was previously occupied as the grouping of features encountered within the evaluation trenches suggests.

7.3.2 A possible early field system was recorded in the north-western part of the site which seemed to made use of the western slope. Two ditches were recorded; one aligned along the north-south ridge and the other aligning at right angles towards the west. A pit to the east of the ditches marks an adjacent area of possible occupation on the ridge, all dating back to M/LBA-EIA.

- 7.3.3 The north-eastern slope showed some isolated features consisting of pits dated LIA-ERB, and undated but probably contemporary postholes and slot of a truncated structure.
- 7.3.4 The central area situated in a broad dip contained the densest assemblage of features. Residual flints and LIA-ERB artefacts may suggest several periods of occupation although the strongest signs of a settlement are of the later period. The evidence consisted of ditches and structural features such as postholes, slots, hearths and pits, with possibly associated boundary ditches to the north-east.

7.4 Date of occupation

- 7.4.1 As there was hardly any stratigraphical superposition most of the archaeological features have been dated by ceramic artefacts (see Appendix 1). Other features which contained no dating evidence were provisionally dated by morphological and spacial associations and the characteristics of their fills. However, the small size of the assemblage and its undiagnostic nature only allowed the application of broadest period divisions. The occupation recorded as feature fills was classified as part of two period ranges:
- 7.4.2 MLBA-LIA
[130] *1420TT* and [118] *1862TT*.
- 7.4.3 LIA-ERB
[102], [106] *1414TT*
[115] *1423TT*
[149], *1437TT*
[173], [174] *1438TT*
[169] *1439TT*
[133], [157], [188] *1444TT*
[155], [187] *1448TT*
- 7.4.4 ERB
[145], [147] *1437TT*
- 7.4.5 Roman
[102] *1414TT*
[151], [156] *1437TT*
[140] *1444TT*
- 7.4.6 Features of the north-western slope and the central settlement contained mixed LIA-ERB and Roman pottery suggesting a contemporary and continuous occupation in both areas.

7.5 Table 3 : Bulk material summary

Pottery

Material	Count	Period
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Pot	89	M/LBA-EIA
Pot	79	LIA-ERB + R

Daub/Ceramic Building Material

Material	Count	Period
Daub	70	LIA-ERB
Daub	1	Undated
CBM	2	LIA-ERB
Stone	5	LIA-ERB

Bones

Material	Count	Period
Animal bone	51	LIA-ERB
Animal bone	10	Undated

Flint

Material	Count	Period
Flint	8	M/LBA-EIA
Flint	22	LIA-ERB
Flint	10	Undated

7.6 Environmental evidence

- 7.6.1 Three soil samples were taken to recover biological remains. Scanning of flots showed the presence of small numbers of charred cereal grains, eg. wheat (*Triticum* spp.), in two of the sampled features, fill [156] of ?kiln/hearth [158] 1444TT, and primary ditch fill [131] of ditch [117] 1420TT, and charred weed seeds in fill [156] 1444TT, and fill [163] of hearth [164] 1446TT. Relatively large quantities of charcoal flecks and small fragments were also recovered in the samples taken from primary ditch fill [131] and hearth fill [163]. A report on the assessment of these assemblages is included below (see Appendix 4).

8 IMPORTANCE OF THE ARCHAEOLOGICAL REMAINS

8.1 Survival and conditions

8.1.1 The survival and condition of features depended on location with respect to the terrain and the effect of modern ploughing. They have been divide into several categories: The north-western slope was exposed to ancient erosion and down-slope movement which affected the subsoil resulting in the lowest density of features and a poor degree of survival.

The central dip or plateau, having had the best conditions to build a settlement also contained the highest density of features with the best survival.

The easternmost part of the site may show the limit of the settlement followed by agricultural landuse. The survival of features here is moderate.

8.1.2 The survival and condition of palaeo-environmental deposits within cut features is good, however, archaeological horizons sealing the natural may be affected by modern ploughing as indicated by only limited survival of ancient horizontal stratigraphy. Artefactual remains were generally in a moderate to poor condition.

8.2 Period

8.2.1 Preliminary results suggest that during M/LBA-EIA the central part of the site contained some settlement occupation while landuse on the periphery was agricultural.

8.2.2 Occupation may either have continued or was reestablished during LIA-ERB times along Watling Street. The existence of a settlement here adds important details to the mapping of the North Kent population. Of particular interest is the period of transition from Iron Age to Early Roman times about which comparatively little is known in this area. Further excavation could help to broaden our knowledge about settlements present before and around the time of the arrival of the Romans in the Southeast.

8.3 Rarity

8.3.1 Numerous Roman sites, including villas and farmsteads have been recorded in the Darent and Medway valleys of North Kent but mainly along the rivers (Bird 1996). This site is situated between the two rivers and adds information to blank parts of the archaeological map.

8.4 Fragility and vulnerability

8.4.1 Evaluation work has confirmed that archaeological features survive cut into natural geology overlain by topsoil. Any intrusive work undertaken in connection with the CTRL will be likely to damage features and deposits of archaeological interest.

8.5 Diversity

- 8.5.1 The features encountered range from ditches of field systems to structural and occupational features of a settlement, spanning two broad periods from M/LBA-EIA to LIA-ERB.

8.6 Documentation

- 8.6.1 Although there is no previous documentation relating directly to the site, several field surveys have been undertaken as part of the CTRL project. An evaluation was undertaken by the Oxford Archaeological Unit in 1995 (URL 1995) immediately to the east of the A227 following a surface collection survey (URL 1994), which located surface artefact concentrations on the site, and a geophysical survey was undertaken by A. Bartlett & Associates in 1995 (URL 1996) which located several areas of geophysical anomalies.

8.7 Group value

- 8.7.1 The LIA-ERB settlement south of Watling Street appears to be one of a series of sites at the foot of the Downs of a similar date (URL 1994, Vol.1).

8.8 Potential

- 8.8.1 Evaluation has shown that the area is likely to contain LIA to ERB features and deposits over a wide area with the potential for at least one settlement focus. The potential for the M/LBA to EIA is less clear and activity less intense. This period is represented by ditches and a pit.

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- URL, 1997b
 Thurnham Roman Villa and Land South of Corbier Hall, Thurnham, Kent. Archaeological Evaluation Report (Prepared for URL by A Mudd, OAU)

APPENDIX 1**1 POTTERY***By J. Cotton & R.P.Symonds***1.1 Introduction**

1.1.1 The evaluation produced a total of 166 sherds (1628g), dating to late Bronze Age - early Iron Age, mid Iron Age, late Iron Age - early Romano-British and Roman periods. The sherds are in moderate condition; some have abraded edges and worn surfaces. The average sherd weight is just under 10g. The pottery was examined using a x20 binocular microscope and recorded using standard MoLAS codes on pro-forma sheets. Quantification of the material was by sherd count and weight. Pottery was recorded from 20 contexts and unstratified cleaning.

1.2 Fabrics

1.2.1 The fabrics have been defined on the basis of their main inclusions, and were not divided into defined fabric types. The late Bronze Age - early Iron Age fabrics are all flint-tempered, one abundantly tempered with coarsely crushed flint, the second more sparsely tempered with coarsely crushed flint and the third has a finer sandy matrix with fine, sparser flint-tempering. The mid Iron Age fabrics are fine sand and organic-tempered and fine flint-tempered. The late Iron Age - early Romano-British fabrics fall into three broad temper types. The broad temper types represent fabric traditions of the pre-Roman period and are not Romanised in character or methods of manufacture. The Roman sherds have been assigned to either known ware types or recorded under a generic code relating to colour and fabric type.

Table 4 : Fabric groups

DATE	FABRIC	NO.OF SHERDS	WEIGHT
Late Bronze Age - early Iron Age	Flint-tempered fabric 1	64 sherds	819g
	Flint-tempered fabric 2	9 sherds	9g
	Sandy fabric	4 sherds	13g
Mid Iron Age	Flint -tempered fabric	1 sherd	2g
	Sand -tempered fabric	1 sherd	7g
Late Iron Age - early Romano-British	Shell-tempered fabrics	65 sherds	415g
	Grog-tempered fabrics	6 sherds	67g
	Glauconite-tempered fabrics	1 sherd	11g
	Sand-tempered fabrics	3 sherds	20g
Roman	Patchgrove grog-	7 sherds	227g

DATE	FABRIC	NO. OF SHERDS	WEIGHT
	tempered ware		
	Un sourced reduced fine fabrics	1 sherd	3g
	Un sourced fine oxidized fabrics	2 sherds	4g
	South Gaulish samian	1 sherd	<1g
	Un sourced oxidized fabrics	3 sherds	31g

1.3 Forms

1.3.1 Few forms could be discerned due to the undiagnostic nature of the material. The late Bronze Age - early Iron Age assemblage includes a number of sherds, possibly belonging to one vessel; a situlate jar (including the shoulder and fragments of a slightly everted rim) from context [118]. Also present from this context, in the sandy fabric, is a small cup. Amongst the Roman material only two forms could be confidently assigned, a Dragendorff 27 cup (6DR27) from context [156] and a necked storage jar (2V) from context [145 & 47]. It seems likely that the majority of the body sherds present are from jars or wide mouthed bowls. No other feature sherds are present and no decoration is present on any of the sherds.

1.4 Chronology

1.4.1 Flint-tempered fabrics have a long tradition of use, throughout the prehistoric period in the Medway valley and across East Kent (Pollard 1988, 31). The earliest prehistoric assemblage appears to date to the late Bronze Age - early Iron Age. The situlate jar is similar to others identified in Kent (Macpherson Grant *pers. com.*) and in the Thames Valley e.g (Canham 1978, 24 fig. 37), which have been dated to this transitional period. The presence of sherds dating to the late Bronze Age - early Iron Age and mid Iron Age suggests activity on the site may have continued throughout the period. However, the very small quantities of pottery recovered make it impossible to elucidate on the extent of any activity. The absence of more diagnostic feature sherds, such as rims or decorated sherds makes closer dating impossible.

1.4.2 The late Iron Age - Early Romano-British fabric types identified were established prior to the Roman conquest and continued in use until *c.* late 1st century AD, with the exception of glauconite-tempered fabrics. The presence of only a single glauconite-tempered sherd is notable, considering the location of the site on the west side of the Medway valley. The Medway valley is a focus for sites with glauconite fabrics, because of the local deposits of greensand. The use of glauconite fabrics in this area has its origins in the mid Iron Age and continues in use until the conquest period (Thompson 1982, 12). Therefore the presence of this sherd may imply a pre-conquest date for some of the material, although the size of the assemblage prevents any firmer conclusions. The late Iron Age - early Romano-British assemblage is dominated by shell tempered fabrics; these are in widespread use from the later 1st century BC to the later 1st century AD. (*op.cit.*)

- 1.4.3 There is only a small quantity of Roman material that can be closely dated. This includes a sherd of South Gaulish samian, Dragendorff 27 cup, probably dating to the mid-late 1st century and several sherds from a 'Patch Grove' storage jar. 'Patch Grove' is a fabric indigenous to Kent in the post-conquest period (Pollard 1988, 39). However, none of the Roman material need date later the end of the 1st century and may be contemporary with the native fabrics. The size of the assemblage and the lack of diagnostic sherds has limited more detailed analysis of chronology.

1.5 General comments

- 1.5.1 The late Bronze Age - early Iron Age assemblage was recovered from a pit, context [119], which also contained burnt flint. A total of fifty-seven sherds, some of them large and apparently belonging to a single vessel, were retrieved. This suggests that the sherds comprise a primary deposit and that a focus of activity lay close by. Assuming this pit is not an isolated feature, it would appear that the focus of activity is in the nearby vicinity. Further early Iron Age sherds were recovered from the primary fill of a large boundary ditch, context [117]. The mid Iron age sherds were recovered from another ditch feature, context [142]. The late Iron Age - early Romano-British assemblage is typical of the area for this period. The fabrics established in the Iron Age period continue to dominate, with the introduction of shell-tempered fabrics in the later 1st century BC. All these traditions continue in use into the later 1st century AD. The small amount of Roman material suggests occupation/activity continued into the conquest period.

1.6 Assessment of Potential and further work

- 1.6.1 The present assemblage is of limited potential when considered in isolation. However, when examined in conjunction with other material from this area it can contribute to our understanding of the regional ceramics. The recovery of further evidence for the late Bronze Age - early Iron Age is another important find spot. Further information is required for this period, particularly in relation to settlement patterns and morphology. The pit and ceramic assemblage may suggest nearby activity and this should be taken into account, when considering further work in the area. If further excavation was to take place the addition of any resulting material would form a useful assemblage. In the event of no further work occurring, the late Bronze Age - early Iron Age assemblage warrants publication because it is further evidence for this transitional period. The two sherds of mid Iron Age date have little potential and further material is required before the relationship between these sherds and the earlier assemblage is understood.
- 1.6.2 For the late Iron Age-early Romano-British and Roman period, the distribution of fabric wares is well documented for this area. However, further assemblages are required to refine our understanding of the relative proportions of fabric types and their chronologies. The recovery of further pottery of this period would help to refine the dating and nature of this activity.

Bibliography

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Thompson, I. 1982, Grog-tempered 'Belgic' pottery of South-eastern England, *BAR 108*

Canham, R. 1978, 'Excavations at London (Heathrow) Airport 1969' *Trans London Middlesex Archaeol Soc 29*: 1-44

Table 5 : Bulk Dataset, Pottery

Key:

M/LBA-EIA Middle /Late Bronze Age to Early Iron Age

PH Prehistoric

LIA-ERB Late Iron Age to Early Romano British

ERB Early Romano British

R Roman

TRENCH_UCL	CONTEXT	COUNT	WEIGHT	COMMENTS
	0	2	6	RB
1414TT	102	1	4	Roman
1414TT	106	4	29	LIA-ERB
1423TT	115	4	6	LIA-ERB
1862TT	118	68	832	Earlier prehistoric; M/LBA to EIA; includes part of bi-conical urn.
1420TT	125	1	11	Glauconite sh.; LIA-ERB
1420TT	130	9	9	M/LBA-EIA
1444TT	133	1	8	LIA-ERB
1444TT	140	1	4	Roman
1437TT	141	2	9	Prehistoric; plain, upright rim.

TRENCH_ULC	CONTEXT	COUNT	WEIGHT	COMMENTS
1437TT	145	9	271	ERB; 6 sherds from 1 vessel.
1437TT	147	1	36	ERB; SL=145
1437TT	149	2	10	LIA-ERB
1437TT	151	1	25	Roman
1448TT	155	7	22	LIA-ERB
1444TT	156	6	50	AD 50-100; samian
1439TT	169	1	10	LIA-ERB
1438TT	173	8	38	LIA-ERB; v. abraded & burnt.
1438TT	174	31	190	LIA-ERB; v. abraded & burnt.
1448TT	187	1	2	LIA-ERB
1444TT	188	8	65	LIA-ERB

APPENDIX 2

1.1.1.1 building materials

By Terence Paul Smith

1.1.1.1.1 Introduction

1.1.1.1.1.1 Most of the building material from this site (ARC WNB 97) consisted of daub, much of it only existing as tiny fragments, although there were also *some* larger pieces, between *c.*40 and *c.*100 mm. One fragment of Roman ceramic building material and two fragments of stone - one at least of them building stone - were also recovered. All contexts containing building material except for context [104] had associated pottery, mostly of late Iron Age/early Romano-British type; context [156], however, had pottery of the period AD 50-100.

1.1.1.1.2 Daub

1.1.1.1.2.1 Daub was recovered, mostly as small fragments, from contexts [102, 104, 106, 115, 125, 145, 149, 151, 156, 173, and 174].

1.1.1.1.2.2 Daub fabrics were examined microscopically (x10); they differed from one another and may be listed as follows:

Context [102]: Fine matrix with some shell and small black iron oxides; brown colour.

Context [104]: Slightly sandy matrix; brown colour.

Context [106]: Red/brown matrix with some sand and calcium carbonate; some have a slightly finer matrix, light brown to red in colour, with fine black iron oxides.

Context [115]: Fine brown matrix with some flint and crushed shell.

Context [125]: Fine brown matrix.

Context [145]: Fairly sandy brown matrix with tiny black iron oxides in some pieces; some also have crushed shell.

Context [149]: Fairly coarse light brown matrix with quartz and tiny black iron oxides and a little chalk.

Context [151]: Fairly fine brown matrix with black iron oxides.

Context [156]: Fairly sandy brown matrix; some pieces with small stones.

Context [173]: Red brick-like matrix, fairly sandy.

Context [174]: Brown matrix, very sandy with numerous tiny black iron oxides.

1.1.1.1.2.3 These fabrics are almost certainly of local provenance, the several inclusions such as chalk and flint being common in Kent; differences are due to the use of superficial geological deposits, which can vary quite widely even within a restricted area..

1.1.1.1.2.4 The straw or hay impressions noted in a few examples indicate the use of those materials as binders; this was essential to stop the daub from cracking and disintegrating as it

dried. It could be added to the daub mixture either direct or in the form of manure from farm animals.

1.1.1.1.2.5 A total of 19 pieces, from contexts [106, 125, 145, 156, and 174], showed rounded impressions formed by the wattles against which the daub was placed. Of particular interest here was a larger than usual (for this site) fragment from context [156], which had the possible impression of a squared wooden post and, on the opposite side, wattle impressions running at right-angles to the supposed post. The likely interpretation of this is that the fragment came from the wattle-and-daub panel of a timber-framed building; the square impression would thus represent a vertical post or stud and the withy impressions would represent horizontal wattle. Six pieces from the same context showed quite well preserved wattle impressions, capable of being measured: the withies would have been *c.* 14-15 mm in diameter.

1.1.1.1.2.6 Two fragments, again from context [156], fitted together to form a single piece. It had a flattish surface with rough finger marks (but not finger *prints*) where the daub had been kneaded into place on the wattle.

1.1.1.1.2.7 Some of the daub from contexts [115] and [156] showed signs of burning.

1.1.1.1.2.8 Wattle-and-daub was much used from prehistoric times down to the end of the Middle Ages, sometimes in free-standing walls of huts and hovels but also as panel infilling to timber-framed walls; even in post-medieval times it was sometimes used, especially for infill in internal partition walls of 'low status' houses. As mentioned (2.5, above), there is evidence for the use of wattle as infill within a timber-framed wall on a piece from context [156].

1.1.1.1.2.9 Independently daub is not a good indicator of date. Probably, however, the daub from this site corresponds in date to the quite consistent pottery dating - that is to say, most of it will belong to the late Iron Age or early Romano-British periods. That from context [156] is more precisely dated by pottery to the decades immediately after the Roman Conquest. It *may* be significant in this respect that it is this slightly later context that shows signs of timber-framing. Caution is needed, however, in view of the fragmentary nature and small quantities of the material recovered.

1.1.1.1.3 Roman Ceramic Building Material

1.1.1.1.3.1 This was limited to a single fragment of tegula in context [169]. Tegulae were large flat roofing tiles with flanges at each side, used in tandem with curved imbrices to form roof coverings to roman buildings. The example from this site, however, did not preserve anything of its flange. It was 18-20 mm thick. It was in a red-firing fabric belonging to MoLAS fabric group 2815. This comprises related fabrics in various shades of red, orange, or brown with differing amounts of quartz and occasional scatters of limestone and black iron oxides. Building materials in these fabrics were made between the mid-1st and the mid- to late 2nd century AD, with one variant (not present at this site) continuing into the 3rd century. The associated pottery of late Iron Age/early Romano-British date is consistent with the early Roman date of the tegula fabric. Materials in these fabrics were made at various kiln sites on either side of Watling Street between London and St Albans (*Verulamium*) and perhaps also at kilns to the south-west of London. The occurrence of material in one of these fabrics in Kent reveals something about trading patterns in ceramic building materials, although it is already known that this material was employed fairly widely in south-eastern England.

1.1.1.1.4 Stone

1.1.1.1.4.1 A fragment of chalk rubble (MoLAS fabric 3116) was recovered from context [156]; it was *perhaps* used as building rubble, although no mortar was present and it is therefore not certain even that the fragment was building rubble rather than a loose fragment of no structural significance.

1.1.1.1.4.2 From the same context [156] came a fragment of Kentish Rag (MoLAS fabric 3105), though a more sandy transitional type than that more usually encountered. Kentish Rag was quarried in the area around Maidstone from the Roman period onwards. This piece had a flat face and rounded (abraded?) corners; it was 56 mm thick and could be part either of a paving slab or of an ashlar (squared) building block. The flat face did not preserve traces of tooling.

1.1.1.1.4.3 It is, of course impossible, to date featureless stone; in this case, the stone must be dated by the associated pottery, which is of the period AD 50-100.

1.1.1.1.5 Assessment of potential and further work

1.1.1.1.5.1 It is unlikely that further investigation into the fragmentary material from this site will add appreciably to our knowledge. Further work on the building material, therefore, is not recommended.

1.1.1.1.6 Bulk Dataset**1.1.1.1.6.1 Table 6 : Building Materials***Key:*

M/LBA-EIA

Middle /Late Bronze Age to Early Iron Age

PH

Prehistoric

LIA-ERB

Late Iron Age to Early Romano British

ERB

Early Romano British

R

Roman

TRENCH_ULC	CONTEXT	MATERIAL	COUNT	WEIGHT
1439TT	169	CERAMIC BUILDING MATERIAL	2	112
1414TT	102	DAUB	1	6
1414TT	104	DAUB	1	6
1414TT	106	DAUB	12	86
1423TT	115	DAUB	3	12
1420TT	125	DAUB	2	18
1437TT	145	DAUB	20	342
1437TT	149	DAUB	6	20
1437TT	151	DAUB	1	2
1444TT	156	DAUB	16	788
1438TT	173	DAUB	5	24
1438TT	174	DAUB	4	80
1444TT	156	STONE	5	622

APPENDIX 3

1.1.1.1 animal bones

By Alan Pipe, Environmental Archaeology Section, Museum of London Archaeology Service

1.1.1.1.1 Introduction

1.1.1.1.1.1 This report discusses the animal bones from West of Northumberland Bottom (ARC WNB 97).

1.1.1.1.1.2 The condition of the bone, which relates directly to the potential value of the assemblage for further study, was described using a scale of 1 to 5 where 1 corresponds to bone in excellent condition with no surface damage, and 5 describes bone with sufficient surface erosion to prevent identification of species, skeletal element, butchery marks, fusion lines and measurement points.

1.1.1.1.1.3 The bones were identified in terms of species and skeletal element ('bone') using MoLAS reference collections. When accurate identification was impossible due to excessive erosion and fragmentation, material was assigned to the approximate categories 'cattle-sized mammal', 'sheep-sized mammal', and 'long-bone fragment'.

1.1.1.1.2 Results

1.1.1.1.2.1 The condition of the bone was generally poor to moderate with sufficient surface erosion to obscure surface detail, butchery marks, and measurement points. There was little inter-context variation in terms of condition; using the scale of 1 (excellent) to 5 (very poor/identifiable only as 'bone') this material is predominantly in the 3-4 range.

1.1.1.1.2.2 The bones were heavily fragmented; much of the material is in the 25-75mm size range.

1.1.1.1.2.3 There was a total of 63 fragments/0.42 kg of bone; only 20 of these were identifiable to species. The species represented are cattle (8 fragments), sheep/goat (11 fragments), and pig (2 fragments); however, the majority of the fragments were allocated to the 'sheep-sized mammal', and 'cattle-sized mammal' categories.

1.1.1.1.2.4 Cattle were represented by elements from the head (teeth, skull, mandible), lower limb (ulna, carpal, astragalus), and feet (metacarpal); sheep/goat by elements from the head (teeth), vertebrae and ribs, upper limb (humerus, femur), and lower limb (tibia); pig by upper-limb (pelvis) and lower limb (ulna).

1.1.1.1.2.5 There were no identifiable traces of butchery or gnawing. There were no measurable bones.

1.1.1.1.2.6 The bones are predominantly derived from adult animals, although unfused epiphyses indicate the presence of juvenile sheep/goat in context [125], and juvenile pig in

[125], and [127]. There are no intact mandibular tooth-rows suitable of determination of age-at-death.

1.1.1.1.3 Summary

1.1.1.1.3.1 The small size and poor preservation state of this bone group indicate only limited potential of this material for further analysis. The recovery only of robust material from the large domestic mammals may reflect poor preservation rather than the real absence of more fragile species. Analysis of a larger assemblage from further excavation should provide useful information on carcass-part representation and, possibly, also age-at-slaughter. The majority of the bone groups derive from the Late Iron Age/early Romano-British periods and, as such, represent an important source of archaeozoological data for this little known period.

1.1.1.1.4 Bulk Dataset

1.1.1.1.4.1 Table 7 : Animal bones

TRENCH_ULC	CONTEXT	COUNT	WEIGHT
1414TT	0	3	26
1414TT	102	2	6
1414TT	106	11	56
1420TT	125	21	98
1420TT	127	2	9
1444TT	133	3	21
1444TT	137	6	8
1448TT	153	1	2
1448TT	155	3	51
1444TT	156	11	142

APPENDIX 4**THE PLANT REMAINS***By John Giorgi, Museum of London Archaeology Service***1.1.1.1.1 Introduction**

1.1.1.1.1.1 Three environmental soil samples were collected during the evaluation and assessed for the presence of charred plant remains. The samples were taken from the following features: the fill [131] (sample <1>) of a late Bronze Age/early Iron Age ditch; the fill [163] (sample <3>) of a late Iron Age/early Roman hearth; and the fill [156] (sample <3>) of an early Roman ditch (AD 50-100). The sample size was ten litres for samples <1> and <3> and 20 litres for sample <2>.

1.1.1.1.1.2 The aim of the assessment was to evaluate the quality of preservation and the abundance and diversity of charred plant remains in the samples and consider the results in the light of potential Romano-British cropmarks and geophysical anomalies recorded close by (Appendix B, Annex II). Recommendations were also to be made on the analysis of the material and the potential for further sampling.

1.1.1.1.2 Methods

1.1.1.1.2.1 The samples were processed in a flotation machine using sieve sizes of 0.25mm and 1mm for the recovery of the flot and residue respectively. The residues were dried and sorted for biological and artefactual remains.

1.1.1.1.2.2 Once dried, the material from each flot was scanned under a binocular microscope. Modes of preservation, abundance and diversity of organic remains were noted. The results of the assessment are summarised in figure 1. Abundance was recorded as follows: + = 1-10 items, ++ = 11-100 items, +++ = >100 items.

1.1.1.1.3 Results

1.1.1.1.3.1 *Late Bronze Age/Early Iron Age Ditch Fill [131] (sample <1>, flot vol. 60ml.):* This flot was rich in charred plant remains, with large quantities of cereal grains and chaff fragments plus small numbers of seeds of wild plants. Flecks and small fragments of charcoal were also present. The cereal grains were generally poorly preserved and appear to be mainly *Triticum* spp. (wheat) grains with both glume wheats, eg. *T. dicoccum/spelta* (emmer/spelt) and possibly free-threshing (cf. *T. aestivum* s.l.) wheats being represented. Occasional grains of *Hordeum* sp. (barley) and *Avena* spp. (oat) were also noted. The chaff fragments consisted mainly of *Triticum* spp. (wheat) glumes and spikelet bases. The small number of charred seeds included *Bromus* spp. (bromes). A few uncharred seeds, eg. *Chenopodium* spp. (goosefoot etc.) and terrestrial molluscs plus a large quantity of root fragments were also present in the flot.

1.1.1.1.3.2 *Early Roman Ditch Fill [156] (sample <2>, flot vol. 20ml.):* The charred plant assemblage from this flot was very similar to the previous sample, although with slightly fewer charred cereal grains and chaff fragments and slightly more seeds of wild plants. The cereal grains were less well preserved than in sample <1> but again appeared to be mainly from

Triticum spp. (wheats) and included *T. dicoccum* (emmer). The chaff fragments consisted mainly of *Triticum* spp. (wheat) glume bases. The charred seeds included *Rumex* sp. (dock), *Lithospermum arvense* (corn gromwell) and *Bromus* spp. (bromes). Several uncharred seeds, eg. *Galium* sp. (bedstraw), *Chenopodium* spp. (goosefoot etc.), and a large quantity of root fragments were also present.

1.1.1.1.3.3 *Late Iron Age/Early Roman Hearth Fill [163] (sample <3>, flot vol. 30ml.)*: The flot from this sample consisted virtually entirely of small charcoal fragments plus very occasional charred cereal grains and seeds of wild plants, eg. *Rumex* sp. (dock). A moderate number of terrestrial molluscs and root fragments were also present in the flot.

1.1.1.1.4 Summary of the Organic Remains in the Flots

1.1.1.1.4.1 Table 8 : Charred and uncharred plant remains, molluscs

Sample	1	2	3
CHARRED PLANT REMAINS			
<i>Triticum</i> spp. grains	+++	++	+
<i>Hordeum</i> sp. grains	+	-	-
<i>Triticum</i> spp. chaff	+++	++	-
Seeds	+	++	+
Charcoal	+++	+++	+++
UNCHARRED PLANT REMAINS			
Roots	+++	+++	++
Seeds	+	+	-
MOLLUSCS	+	-	++

1.1.1.1.5 Statement of Potential

1.1.1.1.5.1 The preservation of charred plant remains was particularly good in samples <1> and <2>. These cereal rich assemblages may provide information from the range of cereals used, to crop-processing activities on the site, while the weed seeds in sample <2> may yield additional information on aspects of crop husbandry. The fact that these two samples are from different periods will allow a comparison in the range of cereals on the site between the late M/LBA-EIA-ERB period. The few uncharred seeds in samples <1> and <2> are probably intrusive given the soil conditions at the site and the presence of large quantities of root fragments in all the samples. There were insufficient molluscs recovered from the ditch fill [131] (sample <1>) for evidence on the character of the local environment.

1.1.1.1.6 Recommendations

1.1.1.1.6.1 It is recommended that the charred plant remains from all the samples are sorted, quantified and analysed. The importance of these charred plant assemblages must be viewed in light of our limited archaeobotanical data from this period and area of north Kent. The botanical remains may be compared to studies of charred plant remains from local sites, eg. TGW97, West of Tollgate (Giorgi in URL 1997) and from a number of sites in Greater London, eg. at the Iron Age/Roman settlements of Beddington, near Croydon (de Moulins 1990) and Uphall Camp, Ilford (Giorgi 1997). In the event of further excavations at the site, systematic bulk sampling of

all feature types should be carried out for the recovery of charred plant remains and potential further information on crop husbandry and processing activities at the site.

1.1.1.1.7 Bibliography

Giorgi J. 1997, *An assessment of the archaeobotanical evidence from Uphall Camp, Ilford (ILFUC87) (MoLAS ASS REP 06/97)*.

Giorgi J. 1997, *An Evaluation of the Plant Remains from West of Tollgate (ARC TGW 97)*.

de Moulins D. 1990, *The Plant Remains from Beddington Villa (forthcoming)*.

1.1.1.1.8 Environmental Dataset

1.1.1.1.8.1 Table 9 : Plant Remains

TRENCH_ULC	CONTEXT	SAMPLE_NUM	METHOD	SUMMARY	COMMENTS
1420TT	131	1	flotation (0.25mm sieve)	uncharred seeds+; roots+++; charred seeds+; charred grain+++; charred chaff++; charcoal+++; molluscs+	rich in charred cereal remains - suitable for further analysis
1444TT	156	2	flotation (0.25mm sieve)	uncharred seeds+; roots+++; charred seeds++; charred grain++; charred chaff++; charcoal+++;	rich in charred cereal remains - suitable for further analysis
1446TT	163	3	flotation (0.25mm sieve)	roots++; charred seeds+; charred grain+; charcoal+++; molluscs++;	virtually all charcoal - little potential

APPENDIX 5

1.1.1.1 Flint

By Jonathan Cotton

1.1.1.1.1 Introduction

1.1.1.1.1.1 Forty pieces of flint were recovered from the evaluation. Twenty five of these were burnt unstruck pieces while the remaining fifteen consisted largely of roughly struck flakes with few diagnostic pieces.

1.1.1.1.2 Results

1.1.1.1.2.1 Four flakes from the boundary ditch [127] *1420TT* had been roughly struck with a hard hammer; such crude flintworking suggests a later Neolithic/Bronze Age date. Of probable similar date was a very wide squat flake which had a notch worked at the distal end as well as being worked as a scraper at one of the lateral edges: this was a residual find within a later pit [106] *1414TT*. Other flakes included the distal end of a small blade, a possible broken scraper and two flakes with marginal retouch. One nodular fragment of Bullhead Bed flint had a crudely worked notch. The other flakes are unremarkable.

1.1.1.1.3 Conclusion

1.1.1.1.3.1 The flint appears to be residual and is generally of little significance. The worked pieces are very crude and display opportunistic use of derived flint. The collection offers no potential for further research.

1.1.1.1.4 Bulk Dataset

1.1.1.1.4.1 Table 10 : Flint

TRENCH_UCL	CONTEXT	MATERIAL	COUNT	WEIGHT	COMMENTS
1414TT	102	FLINT	2	53	1 squat & 1 leaf-shaped flake both with marginal retouch.
1414TT	106	FLINT	1	20	Flake with notch at distal end & scraper at edge
1862TT	118	FLINT	7	359	Burnt
1420TT	125	FLINT	5	292	Burnt
1420TT	127	FLINT	5	99	Roughly-struck flakes. Possibly later Neolithic/Bronze Age.
1420TT	130	FLINT	1	13	"Pebble worked as core"
1444TT	133	FLINT	1	424	Modified natural shatter
1444TT	137	FLINT	1	2	Small blade fragment
1444TT	140	FLINT	1	8	Burnt
1448TT	153	FLINT	2	41	Burnt
1448TT	155	FLINT	3	72	Burnt
1448TT	155	FLINT	1	4	Core-trimming flake
1444TT	156	FLINT	5	241	Burnt
1444TT	156	FLINT	1	2	Flake
1438TT	173	FLINT	2	22	Burnt
1438TT	174	FLINT	1		Possible broken scraper
1444TT	188	FLINT	1	113	Nodule with crudely worked notch.

Graphical data set

EVENT_NAM E	EVENT_CODE	GRAPH_NUM M	GRAPH_TYPE	DESCRIPTION
West of Northumberla nd Bottom	ARC WNB 97	1	Site plan	
West of Northumberla nd Bottom	ARC WNB 97	2	Section 1	Ditch [170]
West of Northumberla nd Bottom	ARC WNB 97	3	Section 2/3	Ditch [180], [182]
West of Northumberla nd Bottom	ARC WNB 97	4	Section 4	Pit [158]
West of Northumberla nd Bottom	ARC WNB 97	5	Section 5	Ditch [117], fills [124-131]
West of Northumberla nd Bottom	ARC WNB 97	6	Section 6 West	Pit [107], fill [106], subsoil and topsoil
West of Northumberla nd Bottom	ARC WNB 97	7	Section 6 East	Posthole [101], fill [100], pit [103], fill [102]
West of Northumberla nd Bottom	ARC WNB 97	8	Section	Ditches [110], fill [109]; Ditch [112], fill+E14 [111]
West of Northumberla nd Bottom	ARC WNB 97	9	Section	Ditch [196], fills [195], [197-200]
West of Northumberla nd Bottom	ARC WNB 97	10	Plan	Pit 107, fill 106
West of Northumberla nd Bottom	ARC WNB 97	11	Plan	Pit [107], fill [106]; ?Pit [104], fill [105]; Posthole [101], fill [100]
West of Northumberla nd Bottom	ARC WNB 97	12	Plan	Ditch [110], fill [109]; Slot [112], fill [111]; 4 Postholes [114]
West of Northumberla nd Bottom	ARC WNB 97	13	Plan	Ditch [117], fill [116]
West of Northumberla nd Bottom	ARC WNB 97	14	Plan	Ditch [117], fill [116]

WEST OF NORTHUMBERLAND BOTTOM (ARC WNB 97) EVALUATION REPORT

West of Northumberland Bottom	ARC WNB 97	15	Plan	Ditch [142], fill [141]; Slot [144], fill [143]
West of Northumberland Bottom	ARC WNB 97	16	Plan	Feature [160]; Feature [159]; Trench/ditch [151]; Postpipe [150], fill [149]; Trench [146], fill [145]; ?Posthole [168].
West of Northumberland Bottom	ARC WNB 97	17	Plan	Post/pit [189]
West of Northumberland Bottom	ARC WNB 97	18	Plan	Pit [175], fills [173, 174]; Posthole [177], fill [176]
West of Northumberland Bottom	ARC WNB 97	19	Plan	Ditch cut/fill [190]
West of Northumberland Bottom	ARC WNB 97	20	Plan	?Well/pit [170], fill [169]
West of Northumberland Bottom	ARC WNB 97	21	Plan	Ditch [172], fill [171]
West of Northumberland Bottom	ARC WNB 97	22	Plan	Feature cut/fill [194]
West of Northumberland Bottom	ARC WNB 97	23	Plan	Pit [132], fill [131]; Posthole [134], fill [133]
West of Northumberland Bottom	ARC WNB 97	24	Plan	Slot [138], fill [137]
West of Northumberland Bottom	ARC WNB 97	25	Plan	?Structural feature [158], fill [157], [140]
West of Northumberland Bottom	ARC WNB 97	26	Plan	Trench 1444TT extension
West of Northumberland Bottom	ARC WNB 97	27	Plan	?Structural feature [158], fill [157], [140]
West of Northumberland Bottom	ARC WNB 97	28	Plan	Posthole/pit [164], fill [163]
West of Northumberland Bottom	ARC WNB 97	29	Plan	Burnt surface [167]; Pit [166], fill [165]

West of Northumberland Bottom	ARC WNB 97	30	Plan	Ditch [152], fill [153], slumping [161], fill [162]
West of Northumberland Bottom	ARC WNB 97	31	Plan	Ditch [154], fill [155]
West of Northumberland Bottom	ARC WNB 97	32	Plan	Linear feature [186], fill [187]
West of Northumberland Bottom	ARC WNB 97	33	Plan	Ditch [180], fill [181]; Ditch [1822], fill [183]; Ditch [185], fill [184]; Sealing deposit [179]
West of Northumberland Bottom	ARC WNB 97	34	Plan	linear features [191]; [193], fill [192]
West of Northumberland Bottom	ARC WNB 97	35	Plan	Slot [123]
West of Northumberland Bottom	ARC WNB 97	36	Plan	Slot [123]; Pit [121], fill [120]
West of Northumberland Bottom	ARC WNB 97	37	Plan	Cut [119], fill [118]
West of Northumberland Bottom	ARC WNB 97	38	Plan	Ditch [196], fill [195].
West of Northumberland Bottom	ARC WNB 97	39	Plan	Evaluation: allocating features to trench locations
West of Northumberland Bottom	ARC WNB 97	40	Cad plan	Evaluation: Allocating feature cut number, kind and period to cad plan
West of Northumberland Bottom	ARC WNB 97	41	Map	Report, Fig 1
West of Northumberland Bottom	ARC WNB 97	42	Cad plan	Report, Fig 1
West of Northumberland Bottom	ARC WNB 97	43	Cad plan	Report, Fig 2

West of Northumberla nd Bottom	ARC WNB 97	44	Cad plan	Report, Fig 3
West of Northumberla nd Bottom	ARC WNB 97	45	Cad plan	Report, Fig 4
West of Northumberla nd Bottom	ARC WNB 97	46	Cad plan	Report, Fig 5
West of Northumberla nd Bottom	ARC WNB 97	47	Cad plan	Report, Fig 6
West of Northumberla nd Bottom	ARC WNB 97	48	Section	Report, Fig 7
West of Northumberla nd Bottom	ARC WNB 97	49	Section	Report, Fig 8
West of Northumberla nd Bottom	ARC WNB 97	50	Col. Frame 1	1420TT: [177]
West of Northumberla nd Bottom	ARC WNB 97	51	Col. Frame 2	1146TT: general shot
West of Northumberla nd Bottom	ARC WNB 97	52	Col. Frame 3	1446TT: [164]
West of Northumberla nd Bottom	ARC WNB 97	53	Col. Frame 4	1448TT: [152]
West of Northumberla nd Bottom	ARC WNB 97	54	Col. Frame 5	1448TT: [161]
West of Northumberla nd Bottom	ARC WNB 97	55	Col. Frame 6	1448TT: [154]
West of Northumberla nd Bottom	ARC WNB 97	56	Col. Frame 7	1444TT: [132]
West of Northumberla nd Bottom	ARC WNB 97	57	Col. Frame 8	1444TT: [134]
West of Northumberla nd Bottom	ARC WNB 97	58	Col. Frame 9	1444TT: [158]
West of Northumberla nd Bottom	ARC WNB 97	59	Col. Frame 10	3057TT: [196]
West of Northumberla nd Bottom	ARC WNB 97	60	Col. Frame 11	3057TT: [196]

West of Northumberla nd Bottom	ARC WNB 97	61	Col. Frame 12	one of 44 trenches
West of Northumberla nd Bottom	ARC WNB 97	62	Col. Frame 13	Gen. site shot
West of Northumberla nd Bottom	ARC WNB 97	63	Col. Frame 14	Gen. site shot
West of Northumberla nd Bottom	ARC WNB 97	64	Col. Frame 15	Gen. site shot
West of Northumberla nd Bottom	ARC WNB 97	65	Col. Frame 16	Gen. site shot
West of Northumberla nd Bottom	ARC WNB 97	66	Col. Frame 17	Gen. site shot
West of Northumberla nd Bottom	ARC WNB 97	67	Col. Frame 18	Gen. site shot
West of Northumberla nd Bottom	ARC WNB 97	68	Col. Frame 19	Gen. site shot
West of Northumberla nd Bottom	ARC WNB 97	69	Col. Frame 20	Gen. site shot
West of Northumberla nd Bottom	ARC WNB 97	70	Col. Frame 21	Gen. site shot
West of Northumberla nd Bottom	ARC WNB 97	71	Col. Frame 22	Gen. site shot
West of Northumberla nd Bottom	ARC WNB 97	72	Col. Frame 23	Gen. site shot
West of Northumberla nd Bottom	ARC WNB 97	73	Col. Frame 24	Gen. site shot
West of Northumberla nd Bottom	ARC WNB 97	74	B+W Frame 0	1444TT: [134]
West of Northumberla nd Bottom	ARC WNB 97	75	B+W Frame 1	1444TT: [134]
West of Northumberla nd Bottom	ARC WNB 97	76	B+W Frame 2	1444TT: [134]
West of Northumberla nd Bottom	ARC WNB 97	77	B+W Frame 3	1439TT: [170]

West of Northumberla nd Bottom	ARC WNB 97	78	B+W Frame 4	1439TT: [170]
West of Northumberla nd Bottom	ARC WNB 97	79	B+W Frame 5	1439TT: [170]
West of Northumberla nd Bottom	ARC WNB 97	80	B+W Frame 6	3057TT: [196]
West of Northumberla nd Bottom	ARC WNB 97	81	B+W Frame 7	3057TT: [196]
West of Northumberla nd Bottom	ARC WNB 97	82	B+W Frame 12	1420TT:[117]
West of Northumberla nd Bottom	ARC WNB 97	83	B+W Frame 13	1420TT:[117]
West of Northumberla nd Bottom	ARC WNB 97	84	B+W Frame 14	1420TT:[117]
West of Northumberla nd Bottom	ARC WNB 97	85	B+W Frame 15	1420TT:[117]
West of Northumberla nd Bottom	ARC WNB 97	86	B+W Frame 16	1420TT:[117]
West of Northumberla nd Bottom	ARC WNB 97	87	B+W Frame 17	1420TT:[117]
West of Northumberla nd Bottom	ARC WNB 97	88	B+W Frame 18	1420TT:[117]
West of Northumberla nd Bottom	ARC WNB 97	89	B+W Frame 19	1420TT:[117]
West of Northumberla nd Bottom	ARC WNB 97	90	B+W Frame 20	1420TT:[117]
West of Northumberla nd Bottom	ARC WNB 97	91	B+W Frame 21	1437TT: [146] + [150]
West of Northumberla nd Bottom	ARC WNB 97	92	B+W Frame 22	1437TT: [146] + [150]
West of Northumberla nd Bottom	ARC WNB 97	93	B+W Frame 23	1437TT: [146] + [150]
West of Northumberla nd Bottom	ARC WNB 97	94	B+W Frame 24	1437TT: [142]

West of Northumberla nd Bottom	ARC WNB 97	95	B+W Frame 25	1437TT: [142]
West of Northumberla nd Bottom	ARC WNB 97	96	B+W Frame 26	1437TT: [142]
West of Northumberla nd Bottom	ARC WNB 97	97	B+W Frame 27	1446TT: [164]
West of Northumberla nd Bottom	ARC WNB 97	98	B+W Frame 28	1448TT: [152]
West of Northumberla nd Bottom	ARC WNB 97	99	B+W Frame 29	1448TT: [161]
West of Northumberla nd Bottom	ARC WNB 97	100	B+W Frame 30	1448TT: [154]
West of Northumberla nd Bottom	ARC WNB 97	101	B+W Frame 31	1444TT: [158]
West of Northumberla nd Bottom	ARC WNB 97	102	B+W Frame 32	1444TT: [158]
West of Northumberla nd Bottom	ARC WNB 97	103	B+W Frame 33	1444TT: [158]
West of Northumberla nd Bottom	ARC WNB 97	104	B+W Frame 34	1444TT: [132]
West of Northumberla nd Bottom	ARC WNB 97	105	B+W Frame 35	1444TT: [132]
West of Northumberla nd Bottom	ARC WNB 97	106	B+W Frame 36	1444TT: [132]

ARC WNB 97 - Section captions

Fig 4 North-facing section of Ditch [117] *1420TT*

Fig 5 East-facing section of ditch [196] *3057TT*

Fig 7 South-facing section of features [101], [103], and [107] *1414TT*

Fig 8

Fig 9 West-facing section of possible well [170] *1439TT*

Fig 10 West-facing section of hearth or possible kiln [158] *1444TT*

Fig 11 East-facing section of ditch [110] and slot [112] *1417TT*

Fig 12 East-facing section of possible boundary ditches [180] and [182] *1449TT*

cut [117] cut [170]

cut [196] [195] [197] [198] [199] [200]

Topsoil	Subsoil	[106]	cut [107]	cut [103]	[102]	cut [101]	[100]
	Natural chalk						

cut [158] [157] [156] [140]

cut [110] [109] cut [112] [111] Topsoil Subsoil

cut [180] [181] cut [182] [183]

Fig 1 Site location plan

WEST OF NORTHUMBERLAND BOTTOM (ARC WNB 97)

Fig 2 Plan of evaluation trenches

Fig 3 Site plan showing the distribution of Mid/Late Bronze Age to Late Iron Age features

Fig 6 Site plan showing the distribution of Late Iron Age to Early Romano-British features

Fig 3

Fig 4

Fig 5

Fig 6

Fig 7

Fig 8

Fig 9

Fig 10

Fig 11

Fig 12

Fig 13

Fig 14

Fig 15

Fig 16

Fig 17